(Major producing areas) 20 Kilometers MINERAL SYMBOLS Dimension sandstone Dimension quartzite Construction sand and gravel Dimension granite County boundary Crushed stone Common clay LEGEND Capital City Clay SS o o D-Sd D D SG D-Q SS Norwich SG WINDHAM **NEW LONDON** SG Willimantic SG SG New London CONNECTICUT SG <u>0</u>-0 TOLLAND o o Tolland o o SG SG MIDDLESEX SG D-Q SG Middletown SG ps-d Clay SG HARTFORD Clay SG Hartford * CS SG SS SS SG SS **NEW HAVEN** SS New Haven SG SG D-G SG CS Litchfield SS SG Bridgeport LITCHFIELD FAIRFIELD SG SG SG CS

Source: Connecticut Geological and Natural History Survey/U.S. Geological Survey (2003)

THE MINERAL INDUSTRY OF CONNECTICUT

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Connecticut Geological and Natural History Survey for collecting information on all nonfuel minerals.

In 2003, the estimated value¹ of nonfuel mineral production for Connecticut was \$142 million, based upon preliminary U.S. Geological Survey (USGS) data. This was an increase of nearly 6% from that of 2002² and followed a 4.7% increase from 2001 to 2002. Because data for dimension stone (quartzite) were withheld to protect company proprietary data, the actual total values for 2001-03 are higher than those reported in table 1.

Crushed stone and construction sand and gravel, the leading nonfuel mineral commodities by value, accounted for nearly all of the State's total nonfuel mineral production and value. In 2003, Connecticut's increase in nonfuel mineral value resulted from a nearly \$5 million rise in the value of construction sand and gravel (production up about 10%), and an increase of more than \$2 million in that of crushed stone. In 2002, Connecticut's increase in value resulted from a \$4 million rise in construction sand and gravel (production up about 9%) and an increase of more than \$2 million in crushed stone (table 1). The values of dimension stone, common clays, and gemstones were unchanged from those of 2001 (descending order of value).

The Connecticut Geological and Natural History Survey³ (CGNHS) provided the following narrative information. Mining companies continued to experience the significant difficulty of permitting and opening new quarries in a heavily populated State. Millane Nurseries attempted to open a sand and gravel quarry in Cromwell, CT, with the intention of later using the quarry land as more growing area. The town Inland Wetlands Commission denied a permit on the grounds that the project was "too intense" to the nearby wetland areas. Since applying in February 2003, Canton Village Construction Co. has been awaiting issuance of a permit from the Town of New Hartford to open a sand and gravel quarry. As of mid-May 2004, the town had not yet made a decision on the activity.

The CGNHS published a new book on Connecticut geology, written mostly for teachers. Connecticut in the Mesozoic World describes the geology of central Connecticut and includes a CD-ROM with pictures, descriptions, directions, and questions for students about a number of accessible Mesozoic sites in the State (McHone, 2004). This publication describes the part of the State wherein lie the State's traprock mines, suppliers of much of Connecticut's crushed stone. Further information regarding this and other CGNHS publications may be obtained by contacting the agency by telephone at (860) 424-3555.

Reference Cited

McHone, J.G., 2004, Connecticut in the Mesozoic world: Hartford, CT, Connecticut Geological and Natural History Survey, 40 p.

CONNECTICUT—2003 9.1

¹The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All 2002 LISGS mineral production date published in this chapter are preliminary estimates as of July 2004 and are expected to shape. Construction send and

All 2003 USGS mineral production data published in this chapter are preliminary estimates as of July 2004 and are expected to change. Construction sand and gravel and crushed stone estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Specialist contact information may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals/contacts/comdir.html; alternatively, specialists' names and telephone numbers may be obtained by calling USGS information at (703) 648-4000 or by calling the USGS Earth Science Information Center at 1-888-ASK-USGS (275-8747). All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

²Values, percentage calculations, and rankings for 2002 may differ from the Minerals Yearbook, Area Reports: Domestic 2002, Volume II, owing to the revision of preliminary 2002 to final 2002 data. Data for 2003 are preliminary and are expected to change; related rankings also may change.

³Nancy W. McHone, an Environmental Analyst with the Connecticut Geological and Natural History Survey, authored the text of the State mineral industry information provided by that agency.

${\bf TABLE~1} \\ {\bf NONFUEL~RAW~MINERAL~PRODUCTION~IN~CONNECTICUT}^{~1,~2} \\$

(Thousand metric tons and thousand dollars)

	2001	2001		2002		2003 ^p	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value	
Clays, common	55 ^e	183 ^e	55	183	55	183	
Gemstones	NA	6	NA	6	NA	6	
Sand and gravel, construction	7,670	44,700	8,140	48,800	8,900	53,800	
Stone:							
Crushed	9,870	83,200	10,200	85,300	10,300	87,600	
Dimension	W	(3)	W	(3)	W	(3)	
Total	XX	128,000	XX	134,000	XX	142,000	

^eEstimated. ^PPreliminary. NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

¹Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Value excluded to avoid disclosing company proprietary data.

 $\label{eq:table 2} {\sf CONNECTICUT:} \ \ {\sf CRUSHED} \ {\sf STONE} \ {\sf SOLD} \ {\sf OR} \ {\sf USED}, \ {\sf BY} \ {\sf KIND}^1$

	2001			2002				
	Number	Quantity			Number	Quantity		
	of	(thousand	Value	Unit	of	(thousand	Value	Unit
Kind	quarries	metric tons)	(thousands)	value	quarries	metric tons)	(thousands)	value
Limestone ²	5	1,100	\$8,960	\$8.16	5	1,020	\$8,680	\$8.50
Dolomite	1	W	W	26.66	1	W	W	26.46
Granite	5	498	3,950	7.93	5	316	2,480	7.85
Fraprock	9	7,770	56,900	7.33	9	8,340	61,700	7.39
Miscellaneous stone	1	W	W	3.75	1	W	W	3.75
Total or average	XX	9,870	83,200	8.43	XX	10,200	85,300	8.40

W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Includes limestone-dolomite reported with no distinction between the two.

TABLE 3 CONNECTICUT: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2002, BY USE $^{\rm 1}$

	Quantity		
	(thousand	Value	Unit
Use	metric tons)	(thousands)	value
Construction:			
Coarse aggregate (+1 1/2 inch):	-		
Riprap and jetty stone	9	\$72	\$8.00
Filter stone	W	W	13.23
Other coarse aggregates	16	213	13.31
Total or average	25	285	11.40
Coarse aggregate, graded:	-		
Concrete aggregate, coarse	W	W	5.51
Bituminous aggregate, coarse	W	W	5.51
Bituminous surface-treatment aggregate	W	W	5.51
Other graded coarse aggregates	414	2,470	5.96
Total or average	414	2,470	5.96
Fine aggregate (-3/8 inch):	-		
Stone sand, bituminous mix or seal	W	W	5.51
Screening, undesignated	W	W	5.51
Other fine aggregates	19	113	5.95
Total or average	19	113	5.95
Coarse and fine aggregates:	_		
Graded road base or subbase	490	2,920	5.96
Unpaved road surfacing	W	W	6.61
Crusher run or fill or waste	W	W	6.61
Other coarse and fine aggregates	21	141	6.71
Total or average	511	3,060	5.99
Other construction materials	22	161	7.32
Agricultural limestone	(2)	(2)	19.42
Unspecified: ³	_		
Reported	8,220	62,700	7.63
Estimated	904	15,900	17.55
Total or average	9,130	78,600	8.61
Grand total or average	10,200	85,300	8.40

W Withheld to avoid disclosing company proprietary data; included with "Other."

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown. ²Withheld to avoid disclosing company proprietary data; included in "Grand total."

³Reported and estimated production without a breakdown by end use.

TABLE 4 CONNECTICUT: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2002, BY MAJOR USE CATEGORY $^{\rm I}$

	Quantity			
	(thousand	Value	Unit	
Use	metric tons)	(thousands)	value	
Concrete aggregate (including concrete sand)	662	\$4,980	\$7.52	
Concrete products (blocks, bricks, pipe, decorative, etc.) ²	290	2,200	7.60	
Asphaltic concrete aggregates and other bituminous mixtures	s 242	1,530	6.31	
Road base and coverings	344	2,520	7.34	
Fill	390	1,760	4.52	
Snow and ice control	199	1,500	7.53	
Other miscellaneous uses ³	66	422	6.39	
Unspecified: ⁴				
Reported	2,960	16,200	5.47	
Estimated	3,000	18,000	6.00	
Total or average	8,140	48,800	6.00	

¹Data are rounded to no more than three significant digits; may not add to totals show

²Includes plaster and gunite sands

³Includes filtration.

⁴Reported and estimated production without a breakdown by end use